IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **Junya Kaku**

Serial No.: **10/542,005**

Filed: **July 12, 2005**

Docket: **050445**

For: **DATA STRUCTURE OF MENU DISPLAY CONTROL DATA AND MENU DISPLAY DEVICE**

Group Art Unit: **2169**

Examiner: **Vei-Chung Liang**

P.T.O. Confirmation No.: **8929**

Date: **October 9, 2008**

BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This paper is in response to the Final Office Action dated June 6, 2008. A Notice of Appeal was filed on October 3, 2008, and no fee is due. However, in the event that this paper is not timely filed, please consider this paper a petition for an appropriate extension of time. Please charge any fees needed for such an extension of time, and any other fees which may be needed to enter this paper, to **Deposit Account No. 01-2340**.

I. REAL PARTY IN INTEREST

The real party in interest is Sanyo Electric Company, Ltd, 5-5 Keihanhondori 2-chome, Moriguchi-shi, Osaka 570-8677, Japan.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-17 are pending and rejected.

IV. STATUS OF AMENDMENTS

The Examiner has informed the undersigned attorney that the Amendment of October 3, 2008 will be entered. The attached Claims Appendix reflects this information.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The Appellant's Hierarchy. The Appellant's specification pages 12-15 disclose a structure of "large items" which are numbered 0-5. These large items have "branch menus" also numbered 0, 1, ... and each of the branch menus can further comprise a number of "small items" also numbered according to the same scheme. For example, the first-discussed large item (page 12, line 7), labeled as large item 0, contains a branch menu 0 that contains small items labeled as 0-2. This is a tree-like structure with hierarchy: large, branch, small.

This structure is exemplified in Fig. 2 where the leftmost categories "classical," "jazz," and "others" are large items, the middle categories listing types of musical instruments are branch menus, and the small items on the right are the individual instruments. Thus, the large item "classical," numbered 0, has a branch menu "string" (instrument), numbered 0, that includes a small item "violin," numbered 0.

The Appellant's Numbers and Cross-Referencing. At page 15, lines 5-8, the specification describes how each branch menu has associated with it a set of three numbers indicating "relationships with another small item." The three numbers are: a leftmost number for a dependent large item; a middle number for a dependent branch item; and a rightmost number for a dependent small item. Each branch menu is cross-referenced to a small item that is *not included* in that branch menu, by including a path to this other small item (the path being the three numbers on the left, middle, and right).

The honorable Board is invited to consider the following example: saxophone and clarinet are both small items in the branch menu devoted to woodwinds, but the saxophone is made of metal and the clarinet is made of wood. Therefore, the clarinet might be cross-

referenced to the small-item viols in the string branch menu, which are also made of wood. The categories of wood, metal, and other are presented in Fig. 3. The specification at page 18, line 6, states that when a symbol translating as "wood" is selected by a cursor, the display of Fig. 13(A) results. Among the these symbols are those translating as "woodwind," "flute," and "wood."

Claim 1. Claim 1 is exemplified in the disclosure as follows:

A data-storage medium (memory card 38 in Fig. 1) *containing a data structure of menu display control data which is read out by a processor* (CPU 44 in Fig. 1) *of a display device* (LCD 30 in Fig. 1) *displaying a menu image, comprising:*

a plurality of first management tables each of which manages a plurality of large items to be subjected to a display process by said processor (left column in Fig. 2, and page 2, line 11); *and*

a plurality of second management tables which belong to each of said plurality of first management tables (middle column in Fig. 2; page 2, line 23-24) *and each of which manages a plurality of small items* (right column in Fig. 2 and page 2, line 3) *to be subjected to a display process by said processor, wherein*

dependency relationship information indicative of dependence on a small item managed under a first management table different from the first management table to which a noticed second management table belongs is assigned to said noticed second management table, so that, when a desired small item is selected, said processor can display a plurality of small items dependent on said desired small item, based on said dependency relationship information.

The final paragraph relates to the above-discussed tree-like structure with a hierarchy (of large, branch, and small), and cross-referencing. This paragraph of claim 1 is literally supported in the specification between page 3, line 3-8, and is explained in relation to Figs. 1-4 in the

detailed description on page 15, lines 5 *et seq.*, for example. The connection between "table" and "menu structure" is set out, for example, at page 8, line 5 and page 11, lines 20-22.

The cross-referencing of claim 1 is recited as "dependency relationship information indicative of dependence on a small item [i.e., cross-referencing] managed under a first[-level] management table different from the first[-level] management table to which a noticed second management table belongs [i.e., the second management table is a level down] is assigned to said noticed second[-level] management table, so that, when a desired small item is selected, said processor can display a plurality of small items dependent on said desired small item, based on said dependency relationship information."

In other words, the dependency relationship information is assigned to a designated second table to indicate small-item dependence. When a small item is selected, the processor displays a plurality of other small items that are dependent on that small item.

The paragraph recites two "first management tables" which are "different." One of them manages the one small item, and the other has a "second management table." The dependency relationship information is assigned to the second management table. Clearly, the small items are under different "first management tables."

The Appellants' dependency is also explained in the Abstract, which reads,

> A display control table comprises GUI tables [numbering N] and menu tables [numbering I] belonging to each of the GUI tables. Each of the GUI tables ... manages a plurality of large items subjected to a display process. Also, each of the menu tables ... manages a plurality of small items subjected to a display process. Assigned to each of the menu tables ... are tree tables [numbering L-1] indicative of dependency relationships with small items managed under the other GUI tables. When a desired small item is selected, a plurality of small items dependent on the desired small item are subjected to a display process, based on these tree tables."

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The Board is invited to note that the small items under one GUI table have dependency relationships with those under another GUI table, i.e., they are cross-referenced. Selecting a small item from one GUI table causes display of a plurality of other small items, as a function of the one small item.

The Appellants' Fig. 5 shows a portion of the display of Fig. 2, with dependency relationship numbers for large items, branch menu, and small item.

Claim 8. Independent claim 8, as exemplified in the disclosure, recites

A menu display device (10) *comprising a display* (30) *to display a menu image based on menu display control data, wherein*

said menu display control data includes a plurality of first management tables which each manage a plurality of large items and a plurality of second management tables which belong to each of said plurality of first management tables and each of which manages a plurality of small items, each of said plurality of second management tables is assigned to dependency relationship information indicative of dependence on a small item under a first management table different from the first management table to which the second management table belongs (this is like the subject matter of claim 1 and is similarly supported), *and*

said display includes a specifier which, when a desired small item is selected, specifies a plurality of small items dependent on said desired small item, based on said dependency relationship information.

The claimed specifier is recited to act based on the dependency relationship information, which is explained above in relation to claim 1. That is, the specifier is the portion of the claimed device that performs the function recited in claim 1.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 7 and 13-17 are rejected under § 101.

Claims 1-4, 6-15, and 17 are rejected under 35 U.S.C. §102(b) as being anticipated by Yamaguchi et al., US 6,795,097.

VII. ARGUMENT AGAINST REJECTION OF CLAIMS 7 and 13-17

(under 35 U.S.C. § 101)

This rejection is respectfully traversed for the record; however, it is believed that the Amendment of October 7, 2008, which the Examiner indicated would be allowed, has overcome the rejection.

For the record, and in case the rejection were to be maintained, the Appellant notes that Claim 1 recites " A data-storage medium containing a data structure" and claim 7, for example, recites "A data structure *according to claim 1*, comprising file storing menu display control data" (emphasis added). Because of claim 7's dependence, claim 7 necessarily contains all the features of claim 1, including the data-storage medium (which the Examiner admits is patentable).

It is noted that the other dependent claims have the same preamble as the rejected claims, but are not rejected. This shows that the rejected claims should also be deemed patentable under § 101, unless the rejection is to be inconsistent, and, therefore, arguably void.

VIII. ARGUMENT AGAINST REJECTION OF CLAIMS 1-4, 6-15, and 17

(under 35 U.S.C. § 102(b) as being anticipated by Yamaguchi et al.)

Yamaguchi contains no disclosure of cross-referencing between different branches of a tree-like data structure. With respect, this feature distinguishes the Appellant's claims from the reference.

Yamaguchi discloses a SIMPLE MENU and a DETAILED MENU in Fig. 33. That figure shows that the simple menu is duplicated farther down the tree of the detailed menu, where it is listed under "capture mode." That is, once in capture mode the user has the same options as in the simple menu: these options are RETURN, STILL, LONG VIDEO, and VIDEO MAIL. The Examiner correctly notes (page 14, line 8) that these options belong to both menus.

Yamaguchi discloses at col. 20, lines 18-27, that either the simple menu or the detailed menu are displayed depending on whether the shift key is depressed, and on the position of the jog-dial (chosen by the user). The Examiner notes this in the second full paragraph on page 14. However, the Examiner equates Yamaguchi's shift key to the Appellants' dependency relationship. With respect, this is not correct. The ability to navigate a tree menu does not imply that any items in the tree have any relationship, whether of dependency or any other kind. All it implies is that the user can reach desired items, <u>by the arbitrary actions of the user</u>.

Yamaguchi does not disclose anything which, *when a desired small item is selected, specifies a plurality of small items dependent on said desired small item* (where "dependent" relates to the claimed *dependency relationship information)*, as recited in claim 8, or the corresponding features in claim 1. This is true because, if the user selects, say, STILL, there is no plurality of other items that have some special relationship with STILL (e.g., dependency relationship). When the user selects STILL, nothing jumps up in front of the user, nothing is

displayed, nothing is activated; nothing is "specified." Neither LONG VIDEO, nor RETURN, nor VIDEO MAIL is specified, from either menu.

Furthermore, no plurality of other items is specified.

The Examiner mentions Yamaguchi's duplication status flag D100*e* and asserts that it anticipates the claims, citing col. 17, lines 46-50, which refers to "two kinds of menu item data D100f." With respect, the Examiner has established no connection between this flag and the simple and detailed menus, or items therein. The Appellant has reviewed the reference and sees no anticipation by this flag D100*e*.

Thus, Yamaguchi fails to teach or suggest the display means recited in claim 8.

The Appellant advances the art of displaying different menus by handling a plurality of display control data through a common procedure, e.g., a single program. To reach this object, the Appellant's display includes a specifier (recited in claim 8) that specifies a plurality of small items being dependent on a desired small item based on the dependency relationship information when the desired small item is selected. As noted above, no specifier is even suggested by Yamaguchi, and therefore claim 1, as well as claim 8, is not anticipated.

Yamaguchi relates to the art of displaying in a PC window, which displays a predetermined set of menu items for single program processing. Yamaguchi does not disclose a menu display apparatus capable of coping with a variety of menu displays by means of the same program.

Independent claims 1 and 8, and therefore their dependent claims, are patentable for the reasons above.

For the reasons above, the honorable Board is requested to overturn the rejections.

Respectfully submitted,

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CLAIMS APPENDIX

Claim 1 (previously presented): A data-storage medium containing a data structure of menu display control data which is read out by a processor of a display device displaying a menu image, comprising:

a plurality of first management tables each of which manages a plurality of large items to be subjected to a display process by said processor; and

a plurality of second management tables which belong to each of said plurality of first management tables and each of which manages a plurality of small items to be subjected to a display process by said processor, wherein

dependency relationship information indicative of dependence on a small item managed under a first management table different from the first management table to which a noticed second management table belongs is assigned to said noticed second management table, so that, when a desired small item is selected, said processor can display a plurality of small items dependent on said desired small item, based on said dependency relationship information.

Claim 2 (previously presented): The data-storage medium containing the data structure according to claim 1, wherein desired small item information indicative of said desired small item is assigned to the first management table managing said desired small item, so that said processor can display said desired small item instead of a large item corresponding to said desired small item, based on said desired small item information.

Claim 3 (previously presented): The data-storage medium containing the data structure according to claim 2, wherein said desired small item information is switched to small item unselected information when said desired small item is deselected, so that said processor can display

the large item corresponding to said desired small item instead of said desired small item, based on said small item unselected information.

Claim 4 (previously presented): The data-storage medium containing the data structure according to claim 1, wherein unselectable information is assigned to the first management table to which a second management table dependent on a small item of the second management table in which said desired small item is not selected belongs, so that said processor can suspend display of the large items managed by the first management table to which said unselectable information is assigned.

Claim 5 (previously presented): The data-storage medium containing the data structure according to claim 1, wherein the plurality of second management tables belonging to each of said plurality of the first management tables form a sequence, and leading position information and number-of-tables information of said plurality of second management tables are assigned to each of said plurality of the first management tables.

Claim 6 (previously presented): The data-storage medium containing the data structure according to claim 1, wherein said dependency relationship information can be indicative of dependency relationships with a plurality of small items.

Claim 7 (previously presented): The data-storage medium containing the data structure according to claim 1, comprising file storing menu display control data.

Claim 8 (previously presented): A menu display device comprising a display to display a menu image based on menu display control data, wherein

said menu display control data includes a plurality of first management tables which each manage a plurality of large items and a plurality of second management tables which belong to each of said plurality of first management tables and each of which manages a plurality of small items, each of said plurality of second management tables is assigned to dependency relationship

information indicative of dependence on a small item under a first management table different from the first management table to which the second management table belongs, and

said display includes a specifier which, when a desired small item is selected, specifies a plurality of small items dependent on said desired small item, based on said dependency relationship information.

Claim 9 (previously presented): The menu display device according to claim 8, wherein

said display further includes a first assigner to assign desired small item information indicative of said desired small item to the first management table managing said desired small item, and a small item display to display said desired small item instead of a large item corresponding to said desired small item based on said desired small item information.

Claim 10 (previously presented): The menu display device according to claim 9, wherein said display further includes a switch for making a switch from said desired small item information to small item unselected information when said desired small item is deselected, and a large item display to display the large item corresponding to said desired small item instead of said desired small item, based on said small item unselected information.

Claim 11 (previously presented): The menu display device according to claim 8, wherein said display further includes a second assigner to assign unselectable information to a first management table to which a second management table dependent on the small items of the second management table in which said desired small item is not selected, and a suspender to display of large items managed by the first management table to which said unselectable information is assigned.

Claim 12 (previously presented): The menu display device according to claim 8, further comprising:

a camera to photograph an object; and

a creator to create an image file containing an image signal of the object photographed by said camera and menu information including said desired small item.

Claim 13 (previously presented): The data-storage medium containing the data structure according to claim 2, comprising file storing menu display control data.

Claim 14 (previously presented): The data-storage medium containing the data structure according to claim 3, comprising file storing menu display control data.

Claim 15 (previously presented): The data-storage medium containing the data structure according to claim 4, comprising file storing menu display control data.

Claim 16 (previously presented): The data-storage medium containing the data structure according to claim 5, comprising file storing menu display control data.

Claim 17 (previously presented): The data-storage medium containing the data structure according to claim 6, comprising file storing menu display control data.

EVIDENCE APPENDIX

There is no evidence to submit.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.